

Appln. No. 09/989,369

Attorney Docket No. 10541-273

II. Remarks

Reconsideration and reexamination of this application in view of the above amendments and the following remarks is herein respectfully requested.

Claims 2 and 16 are being amended and claims 3, 12-14, 17, and 29-31 are being cancelled. Accordingly, after entering this amendment, Claims 2, 4, 8-11, 16, 18, 22-28, and 32-35 remain pending.

Claim Rejections – 35 USC § 112

The Examiner rejected claims 2-4, 8-11, 16-18, 22-28, and 32-35 under 35 USC § 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner rejected independent claims 2 and 16, and the claims depending therefrom, based on the recitation that the pair of sides "extend a distance in and axial direction that is less than the length." Claims 2 and 16 have been amended to delete the language rejected by the Examiner, and therefore the Examiner's rejection is moot.

Claims 4, 8-11, 32, and 33 depend from amended claim 2. Additionally, claims 18, 22-28, 34, and 35 depend from amended claim 16. Therefore, the Examiner's rejection is moot with respect to the above claims.

Further Claim Clarifications

Prior to discussing the cited references, it is believed that a brief discussion on the current form of claims 2 and 16 is warranted. Independent claims 2 and 16 have been amended to clarify, more particularly to point out and distinctly claim that which Applicants regard as the subject matter of the present invention. Specifically, the claims now recite that the cross section is *defined by* a pair of sides and by a *pair of nose ends*. Figure 2a in the original application as filed discloses a pair of nose ends 21 connected by horizontally extending sides, and therefore no new matter has been introduced into the application.

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Claim Rejections – 35 USC § 102(b)

The Examiner rejected claims 2-4, 8-11, 16-18, 25-28, and 32-35 under 35 USC § 102(b) as being anticipated by Awe et al (US Patent No. 3,731,732).

Claims 2 and 16 have been amended to recite that the first curved appendage extends away from the nose end in a direction generally parallel to the pair of sides. Additionally, claims 2 and 16 have been amended to recite that the sides each have a side length, the nose ends each have an end length, and the side lengths are substantially greater than the end lengths. Figures 2a and 3-5 in the original application as filed disclose curved appendages extending from the nose end in a direction parallel to the sides that have a length substantially greater than the length of the nose ends. Therefore, no new matter is added.

Awe et al discloses a pair of flanges 13 extending from the side portions 11 of the tube in a direction substantially perpendicular to the sides 11 of the tubes. (Awe et al, Figures 1, 3-5, col. 1, lines 54 through col. 2, line 7). Furthermore, the ends 12 in Awe et al. cannot be considered to be the sides as defined in claims 2 and 16 because the ends 12 in Awe et al. have a length substantially smaller than the length of the sides 11. Therefore, Awe et al does not disclose the elements recited in claims 2 and 16.

Claims 2, 4, 8-11, 32, and 33 depend indirectly from claim 2. Additionally, claims 18, 22-28, 34, and 35 depend indirectly from claim 16. Therefore, it is respectfully submitted that claims 2, 4, 8-11, 16, 18, 22-28, and 32-35 are not anticipated by Awe et al.

The Examiner rejected 2-4, 8-11, 16-18, 25-28, and 32-35 under 35 USC § 102(b) as anticipated by EP 0 179 381 (the '381 reference).

The '381 reference discloses two pairs of flanges 12, 13 extending from the end portions 11 of the tube in a location not adjacent to the sides 11 of the tubes. (The '381 reference, Figure 3a). More specifically, the flanges extend from the middle section of the end portions. Furthermore, the ends in the '381 reference cannot be considered to be the sides as defined in claims 2 and 16 because the ends in the '381 reference have a length substantially smaller than the length of the sides. Therefore, the '381 reference does not disclose the elements recited in claims 2 and 16.

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Additionally, claims 2 and 16 recite that the first curved appendage is *only* attached to the nose end and that the second pair of appendages *only* attached to the nose end. (Emphasis added). The hollow key 12 and corresponding hollow key 13 disclosed in the '381 reference are disclosed as being "joined", and are therefore attached to each other, and not merely "fit" together as the Examiner states. (The '381 reference, Figure 3a, third paragraph on page 5 of the disclosure). Therefore, the hollow keys 12, 13 are not only attached to the nose ends, and Applicants respectfully assert that the '381 reference does not anticipate claims 2 and 16.

Claims 2, 4, 8-11, 32, and 33 depend indirectly from claim 2. Additionally, claims 18, 22-28, 34, and 35 depend indirectly from claim 16. Therefore, it is respectfully submitted that claims 2, 4, 8-11, 16, 18, 22-28, and 32-35 are not anticipated by the '381 reference.

Rejections Under 35 USC § 103

The Examiner rejected claims 2-4, 8-11, 16-18, 25-28, and 32-35 under 35 USC § 103(a) as being unpatentable over the combined teachings of *O'Connor* (US Patent No. 3,692,105) and *Yoshi et al* (US Patent No. 5,653,283).

Applicants respectfully assert that the Examiner's combination of the above references is improper based on a lack of motivation to modify or combine the references. Specifically, the proposed combination of the references would change the principle of operation of the references and therefore cannot establish prima facie obviousness under MPEP § 2143.01. *Yoshi et al* provides bent flanges 4f that are bent in order to create a gap 6 between the flange 4f and the fins 3, thereby increasing the air flow through the fins from below. (*Yoshi et al*, col. 5, lines 5-10, Figure 1). Conversely, in *O'Connor*, the ridges (not labeled) located on the ends 8, 9 of the tube 1 extend beyond the fins 5. (*O'Connor*, Figure 1, col. 3, lines 8-13). Therefore, providing curved ridges in *O'Connor* would not increase the air flow through the fins 5. Therefore, there is no motivation to modify *O'Connor* to have curved appendages as claimed in claims 2 and 16.

Furthermore, the ridges in *O'Connor* appear to receive a corresponding rectangular shaped gripping tool in order to secure the tube 1 during the machining

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of the fins 5. Therefore, it would be disadvantageous for the flanges in *O'Connor* to be curved because they would provide a less-secure fit with the engaging tool.

Therefore, Applicants respectfully assert that claims 2 and 16 are not anticipated by *O'Connor*, and *Yoshi et al* fails to cure *O'Connor's* deficiencies.

Claims 2, 4, 8-11, 32, and 33 depend indirectly from claim 2. Additionally, claims 18, 22-28, 34, and 35 depend indirectly from claim 16. Therefore, it is respectfully submitted that claims 2, 4, 8-11, 16, 18, 22-28, and 32-35 are not anticipated by *O'Connor* and *Yoshi et al*.

The Examiner rejected claims 2-4, 8-11, 16-18, 25-28, and 32-35 under 35 USC § 103(a) as being unpatentable over the combined teachings of DT 2 239 069 (the '069 reference) and *Yoshi et al*.

Applicants respectfully assert that the Examiner's combination of the above references is improper based on a lack of motivation to modify or combine the references. Specifically, the proposed combination of the references would change the principle of operation of the references and therefore cannot establish prima facie obviousness under MPEP § 2143.01. *Yoshi et al* provides bent flanges 4f that are bent in order to create a gap 6 between the flange 4f and the fins 3, thereby increasing the air flow through the fins from below. (*Yoshi et al*, col. 5, lines 5-10, Figure 1). Conversely, in the '069 reference, the ridges (not labeled) located on the ends 5, 6 of the tube 1 extend beyond the fins 10. (The '069 reference, Figures 1 and 3). Therefore, providing curved ridges in the '069 reference would not increase the air flow through the fins 10. Therefore, there is no motivation to modify the '069 reference to have curved appendages as claimed in claims 2 and 16.

Furthermore, the ridges in the '069 reference appear to receive a corresponding rectangular shaped gripping tool in order to secure the tube 1 during the machining of the fins 10. Therefore, it would be disadvantageous for the flanges in the '069 reference to be curved because they would provide a less-secure fit with the engaging tool.

Therefore, Applicants respectfully assert that claims 2 and 16 are not anticipated by the '069 reference, and *Yoshi et al* fails to cure the '069 reference's deficiencies.

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Claims 2, 4, 8-11, 32, and 33 depend indirectly from claim 2. Additionally, claims 18, 22-28, 34, and 35 depend indirectly from claim 16. Therefore, it is respectfully submitted that claims 2, 4, 8-11, 16, 18, 22-28, and 32-35 are not anticipated by the '069 reference and *Yoshi et al.*

The Examiner rejected claims 2-4, 8-11, 16-18, 25-28, and 32-35 under 35 USC § 103(a) as being obvious by the '381 reference.

Applicants respectfully assert that the Examiner's combination of the above references is improper based on a lack of motivation to modify the reference. Specifically, the proposed modification of the '381 reference would change the principle of operation of the reference and therefore cannot establish prima facie obviousness under MPEP § 2143.01. The two pairs of flanges 12, 13 extend from the end portions 11 of the tube in a location not adjacent to the sides 11 of the tubes. (The '381 reference, Figure 3a). More specifically, the flanges extend from the middle section of the end portions. The flanges 12, 13 are form a more-complete engagement, and therefore a more-secure engagement, with each other due to their circular shapes. If the flanges 12, 13 extended from locations adjacent to the side portions in the '381 reference, then the flanges could not form a complete engagement with each other. Therefore, the Examiner's proposed modification of the '381 reference would change the principle of operation of the reference, and the '381 reference does not disclose the elements recited in claims 2 and 16.

Furthermore, claims 2 and 16 recite that the first curved appendage is *only* attached to the nose end and that the second pair of appendages *only* attached to the nose end. (Emphasis added). The hollow key 12 and corresponding hollow key 13 disclosed in the '381 reference are disclosed as being joined, and are therefore attached to each other and not only attached to the nose ends. (The '381 reference, Figure 3a, third paragraph on page 5 of the disclosure). The respective flanges 12, 13 are joining their respective tubes 10, 11, and therefore it would change the principle of operation of the reference to modify the reference to have non-attached flanges. Therefore, Applicants respectfully assert that the '381 reference does not anticipate claims 2 and 16.

Claims 2, 4, 8-11, 32, and 33 depend indirectly from claim 2. Additionally, claims 18, 22-28, 34, and 35 depend indirectly from claim 16. Therefore, it is

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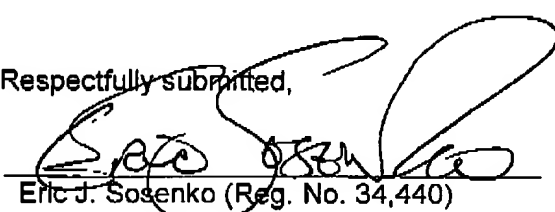
respectfully submitted that claims 2, 4, 8-11, 16, 18, 22-28, and 32-35 are not anticipated by the '381 reference.

Conclusion

In view of the above remarks, it is respectfully submitted that the present form of the claims are patentably distinguishable over the art of record and that this application is now in condition for allowance. Therefore, Applicants request that the Examiner grant early allowance of these claims. The Examiner is invited to contact the undersigned attorney for the Applicants via telephone number (734) 302-6000, if such communication would expedite this application.

5/19/04
Date

Respectfully submitted,


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